IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of

Peter T. Aylward, et al

MATERIALS AND METHOD FOR BACKPRINTING IMAGING MEDIA

Serial No. 10/827,398

Filed 19 April 2004

Mail Stop APPEAL BRIEF-PATENTS Commissioner for Patents P.O. Box 1450 Alexandria, VA. 22313-1450

Sir:

REPLY BRIEF

This is in response to the Examiner's Answer mailed March 25, 2008.

Group Art Unit: 1752 Confirmation No.: 3106

Examiner: Amanda C. Walke

Table Of Contents

THE CLASSIC STATE OF THE CASE	
Table Of Contents	. 1
- 1 T. T. T. A. a. a. a.	.1
Real Party In Interest Related Appeals And Interferences	.1
Related Appeals And interrescies Status Of The Claims	1
Status Of Amendments	1
Status Of Amendments	2
Summary of Claimed Subject Matter Grounds of Rejection to be Reviewed on Appeal	3
Arguments	4
<u>Summary</u>	4
Summary Conclusion	5
Appendix I - Claims on Appeal Appendix II - Evidence	9
Appendix II - Evidence	10
Appendix III - Related Proceedings	

APPELLANT'S BRIEF ON APPEAL

Appellants hereby appeal to the Board of Patent Appeals and Interferences from the Examiner's Final Rejection of claims 1-25 which was contained in the Office Action mailed 09/24/2007.

A timely Notice of Appeal was filed 12/21/2007.

Real Party In Interest

As indicated above in the caption of the Brief, the Eastman Kodak Company is the real party in interest.

Related Appeals And Interferences

No appeals or interferences are known which will directly affect or be directly affected by or have bearing on the Board's decision in the pending appeal.

Status Of The Claims

Claims 1-25 are pending in the application.

Claims 1-25 are being appealed.

Appendix I provides a clean, double-spaced copy of the claims on appeal.

Status Of Amendments

A Notice of Appeal was filed on December 21, 2007, subsequent to the Final Rejection, dated September 24, 2007, not allowing the claims.

Summary of Claimed Subject Matter

The present invention relates to a method for placing indicia on the non-image side of a support for an imaging element (pg. 12, lines 6 – 8; pg. 26, line 13 – pg. 60, line 24) comprising providing a support (pg. 11, line 14 – pg. 25, line 26), wherein said imaging support comprises an image side (pg. 1, line 11; pg. 4, lines 18-19; pg. 62, line 11 (Sample 2)) having at least one imaging layer (pg. 25, lines 14-16) and a non-image side (pg. 4, lines 19-22); contacting said non-image side of said support with a thermal transfer dye donating sheet (pg. 6, lines 22 – 29; pg. 7, line – pg. 12, line 5); applying energy in a pattern (pg. 6, lines 14-19) to said thermal transfer dye donating sheet; transferring said pattern (pg. 5, lines 6-

10) to said non-image side of said support to form indicia (pg. 5, line 21 – pg. 6, line 3), and applying an environmental protection laminate layer to said indicia on said non-image side of said support (pg. 6, lines 20-21, pg. 10, line 26-pg. 12, line 26, Sample 2, pg. 62).

Grounds of Rejection to be Reviewed on Appeal

The following issues are presented for review by the Board of Patent Appeals and Interferences:

1. The rejection of Claims 1-25 as being obvious over Campbell (5,612,283) in view of Chang (6,476,842) and Jones (2003/0038174) under 35 U.S.C. 103(a).

Arguments

Rejection Of Claims 1-25 Under 35 U.S.C. §103(a):

The Examiner has rejected Claims 1-25 under 35 U.S.C. 103(a) as being unpatentable over Campbell (5,612,283) in view of Chang (6,476,842) and Jones (2003/0038174). In the Examiner's Answer at pages 4-5, the Examiner asserts with regard to Campbell that:

...The backing material may have the typical marking such as "back printing" indicia (column 2, lines 1-32). While the transfer image receiving layer is on the front side of the support, the reference clearly teaches a film capable of being printed on and having "back printing" indicia thereon. The reference material for the backing layer is comparable to the polymeric backing "indicia receiving layer" on the back of the support of the instant specification and examples. Given that the reference is silent with respect to the method of printing the indicia on the backing layer, one of ordinary skill in the art would have been motivated to employ any known method. ... (Emphasis added.)

However, Campbell at column 2, lines 17-20, clearly states the type of "back printing" as follows:

In products made by a typical extrusion lamination process, back printing labels, water marks and logos are applied directly to the back side of the paper support stock with inks applied by a gravure printing process. ... (Emphasis added.)

Campbell specifically teaches gravure printing on the backside of an imaging element, as opposed to Appellants' claimed thermal dye transfer. Appellants note that Campbell fails to teach thermal transfer printing on the backside of a support, absent a dye receiving layer on the backside of the support; thermal transfer printing on the non-image side of the imaging element; or application of an environmental protective layer *limited to* the area covered by the indicia, as set forth in Appellants claims.

Chang discloses thermal printing improvements which relate to print energy absorbers, arranged so as not to alter printed characteristics of colorant, in which preheaters lessen the amount of print energy necessary to affect printing. Thermal dye transfer printing with a laser print energy source is disclosed. Chang does not disclose or suggest printing thermal dyes on any material other than a thermal dye receiving layer.

Jones is relied on for teaching a laminate coating. Appellants note Campbell also teaches laminating a clear film to a back side of an imaging element when back side

printing is present. However, neither reference teaches or suggests coating only the portion of the back side having indicia thereon. Considering the back side of the imaging element can be any material, for example, paper or silver halide-containing materials, it is not obvious that coating only the indicia would protect the indicia from environmental degradation due to changes in pH, humidity, or other conditions. The examples in the specification indicate that protection is achieved at least against changes in pH when the back side indicia is coated as claimed.

The references, alone or in any combination, provide no reasonable expectation of success of printing by thermal dye transfer on the backside of an imaging element when the backside does not have a special image receiving layer. Further, the references do not teach or suggest that providing an environmental protection layer to the indicia alone is beneficial. The references fail to provide any disclosure relating to thermally transferred protective layers covering indicia formed by a thermal transfer donor directly on a nonimage side of a support.

Summary

In summary, none of Campbell, Chang, or Jones, either in combination or alone, teach, disclose, or suggest a method of placing a protective layer over indicia, wherein the indicia are printed using a thermal transfer dye donating sheet onto a non-image side of a support, wherein the non-image side does not include a thermal transfer dye-receiving layer. As a result, the Applicants believe that the present invention is not obvious in light of the references.

Conclusion

For the above reasons, Appellants respectfully request that the Board of Patent Appeals and Interferences reverse the rejection by the Examiner and mandate the allowance of Claims 1-25.

Respectfully submitted,

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If the Examiner is unable to reach the Applicant(s) Attorney at the telephone number provided, the Examiner is requested to communicate with Eastman Kodak Company Patent Operations at (585) 477-4656.

Appendix I - Claims on Appeal

- 1. (Previously Presented) A method for placing indicia on the non-image side of a support for an imaging element comprising providing a support, wherein said imaging support comprises an image side having at least one imaging layer and a non-image side; contacting said non-image side of said support with a thermal transfer dye donating sheet; applying energy in a pattern to said thermal transfer dye donating sheet; and transferring said pattern to said non-image side of said support to form indicia, and applying an environmental protection laminate layer to said indicia on said non-image side of said support.
- 2. (Previously Presented) The method of claim 1 wherein said thermal transfer dye donating sheet comprises at least one area containing dyes and at least one environmental protection laminate area.
- 3. (Original) The method of claim 2 wherein said environmental protection laminate area comprises ultraviolet absorbing materials.
- 4. (Original) The method of Claim 3 wherein said ultraviolet absorbing materials is at least one member selected from the group consisting of ultraviolet absorbing dyes, ultraviolet absorbing pigments, ZnO and TiO2.
- 5. (Original) The method of claim 2 wherein said environmental protection laminate area provides protection from photochemical materials.

- 6. (Original) The method of claim 5 wherein said photochemical material protection laminate area comprises at least one hydrophobic polymer.
- 7. (Original) The method of claim 6 wherein said hydrophobic polymer comprise at least one member selected from the group consisting of acrylate, acrylic, polystyrene, vinyl and copolymers thereof.
- 8. (Original) The method of Claim 6 wherein said hydrophobic polymer comprises a blend of polyvinyl acetal and polyvinyl butyral.
- 9. (Original) The method of Claim 5 wherein said photochemical material protection laminate area comprises colloid silica and UV absorbing material
- 10. (Original) The method of claim 2 wherein said environmental protection laminate area comprises abrasion protection materials.
- 11. (Original) The method of Claim 10 wherein said abrasion protection materials comprise at least one material selected from the group consisting of silicas, microbeads, slip agents and fluoropolymers.
- 12. (Original) The method of claim 1 wherein said imaging support comprises paper.

- 13. (Original) The method of claim 12 wherein said paper comprises resin coated paper.
- 14. (Original) The method of claim 12 wherein said paper further comprises at least one biaxially oriented, voided sheet.
- 15. (Original) The method of claim 1 wherein said imaging support comprises a closed cell foam core sheet and adhered thereto an upper and lower polymer flange sheet, and wherein said closed cell foam core sheet comprises an expanded polymer and a blowing agent.
- 16. (Original) The method of claim 15 wherein at least one of said upper and lower polymer flange sheet comprises a biaxially oriented, voided sheet.
- 17. (Original) The method of claim 1 wherein said indicia comprise at least one member selected from the group consisting of letters, pictures, numbers, symbols, pattern and words.
- 18. (Original) The method of claim 1 wherein said energy comprises heat energy.
- 19. (Original) The method of claim 1 wherein said energy comprises laser energy.

- 20. (Original) The method of claim 1 wherein said imaging layer comprises photosensitive silver halide.
- 21. (Original) The method of claim 1 wherein said imaging layer comprises an inkjet imaging layer.
- 22. (Original) The method of claim 1 wherein said imaging layer comprises a thermal imaging layer.
- 23. (Original) The method of claim 1 wherein said imaging layer comprises an electrophotographic imaging layer.
- 24. (Original) The method of claim 1 wherein said support further comprises functional layers.
- 25. (Original) The method of claim 24 wherein said functional layers comprise at least one member selected from the group consisting of antistatic layer, release layer, friction control layer, dye receiving layer.

Appendix II - Evidence

None

Appendix III - Related Proceedings

None